

ppl. No. 09/839,574; Group Art Unit: 1646
 kt. No. 1530.0180002/EKS/EJH;
 nventors: Manthorpe *et al* ; Tel: 202/371-2600
 itle: Compositions and Methods for in vivo Delivery of
 olynucleotide-Based Therapeutics

PLASMID NAME	GENE	PARENTAL PLASMID	PROMOTOR/ ENHANCER	TERMINATOR
VR1223	FIREFLY LUX	VR1012*	CMV	BGH
VR1412	BACTERIAL LACZ	VR1012*	CMV	BGH
VR2901	MOUSE EPO	VR1012*	CMV	BGH
VR2996	MOUSE EPO	VR1012	MV/Desmin	BGH
VR3301	HUMAN SEAP	VR1012*	CMV	BGH
VR3502	RAT PROINSULIN	VR1012*	CMV	BGH
VR4151	HUMAN IFN-OMEGA	VR1055	CMV	mRBG
VR4700	INFLUENZA NP	VR1255**	CMV	mRBG
VR1418	BACTERIAL LACZ	VR1043	RSV	BGH
VR1255	FIREFLY LUX	VR1223	CMV	mRBG
INTERMEDIATE PLASMIDS				
VR1012	NONE	V1J***	CMV	BGH
VR1043	NONE	VR1343	RSV	BGH
VR1055	NONE	VR1255	CMV	mRBG

FIG.1

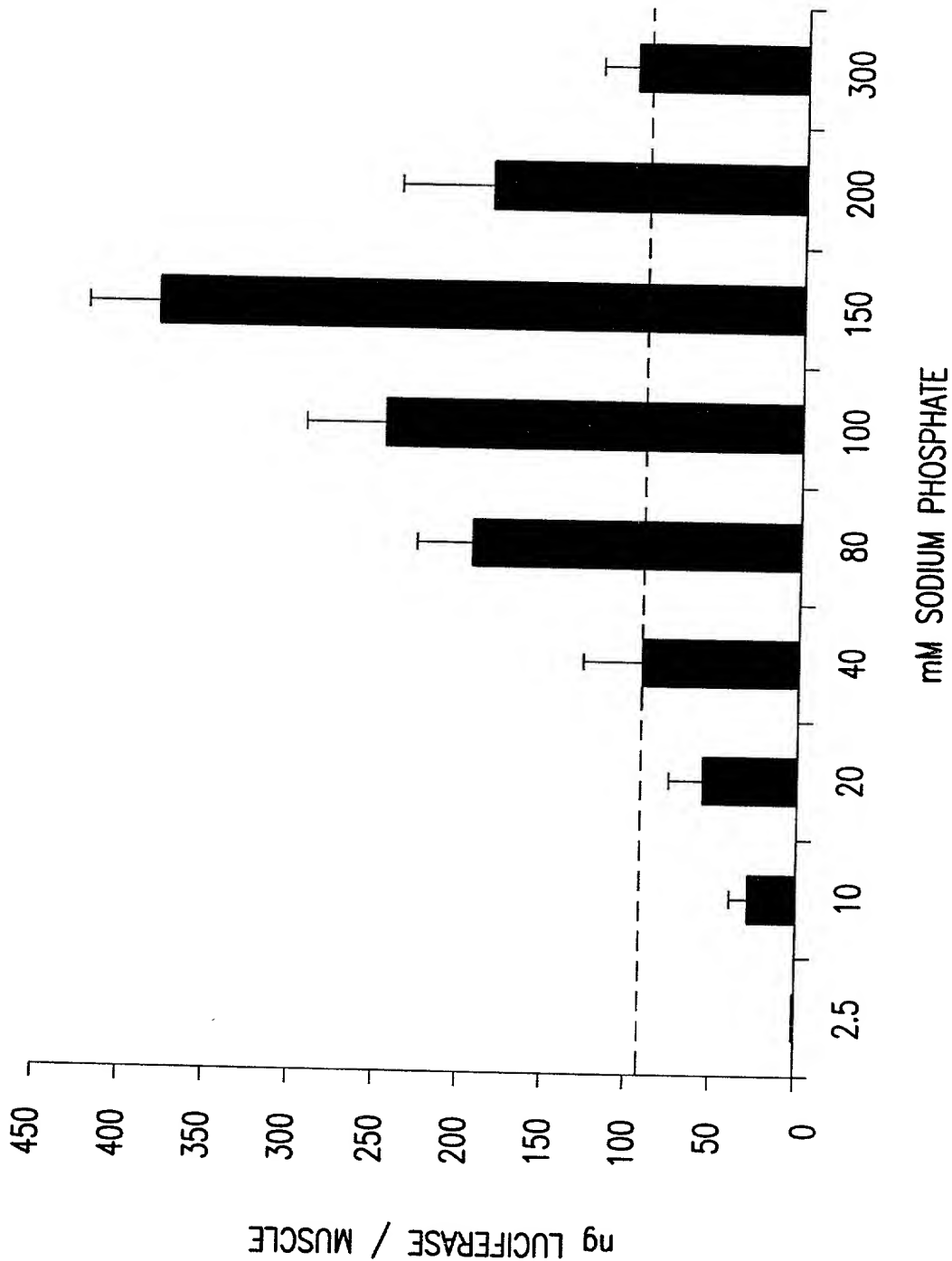


FIG. 2A

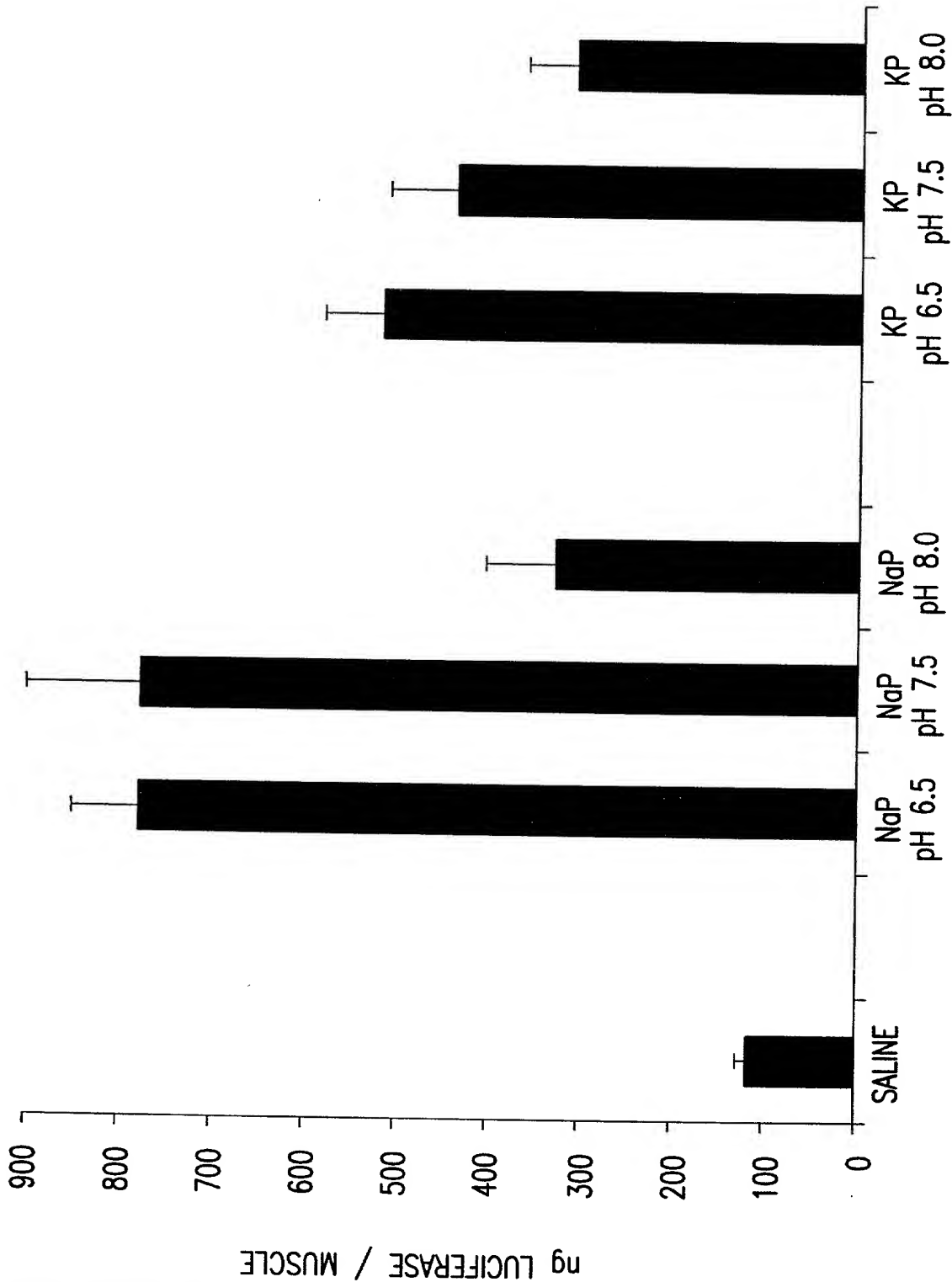


FIG. 2B

444660-125660

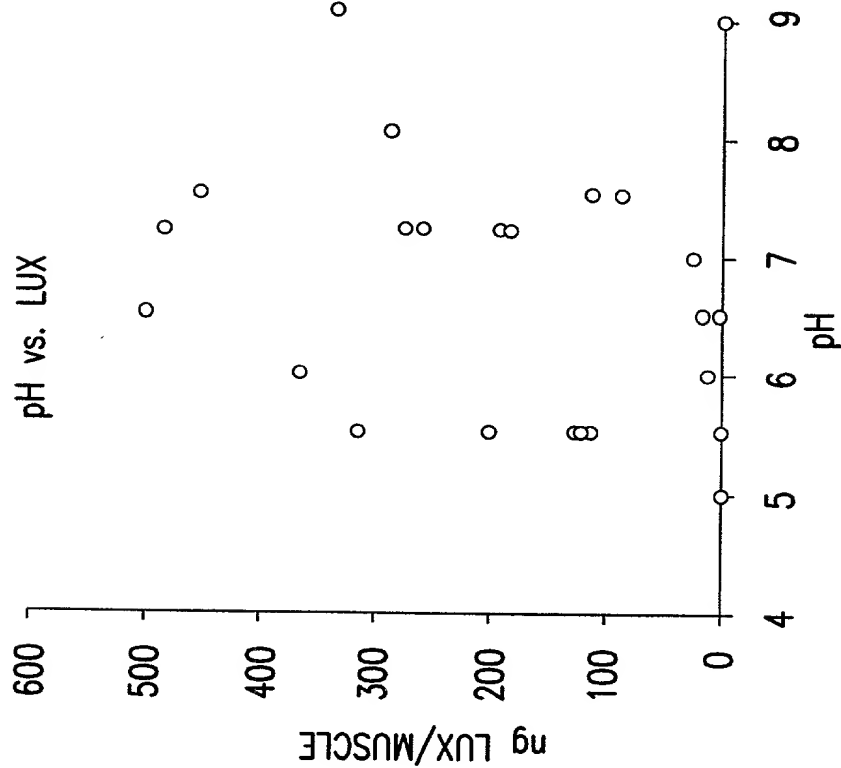


FIG. 2C

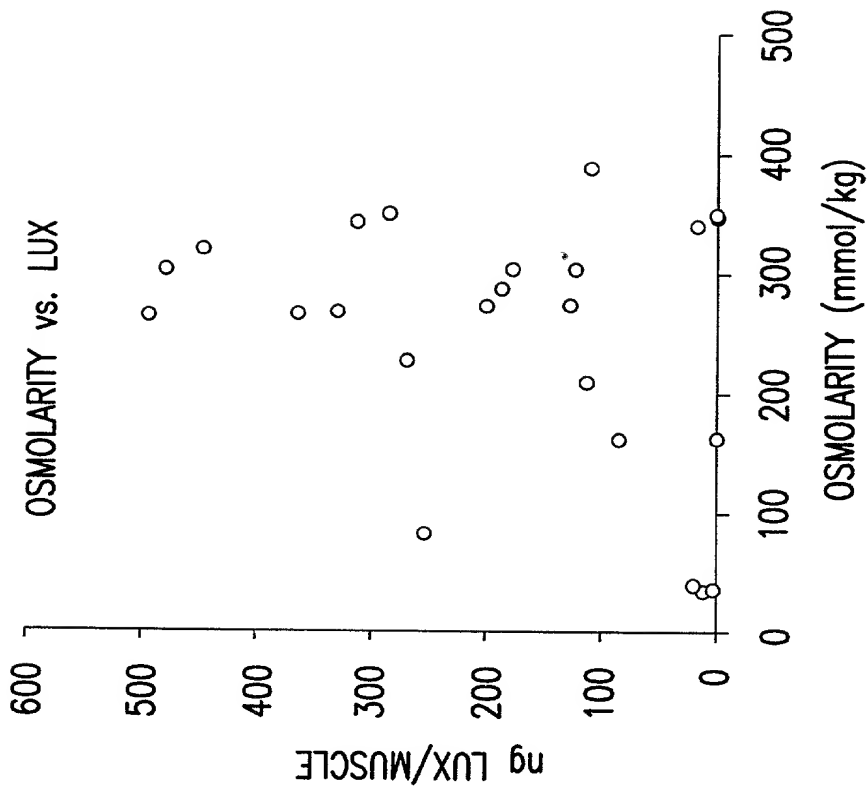


FIG. 2D

Appl. No. 09/839,574; Group Art Unit: 1646
 Dkt. No. 1530.0180002/EKS/EJH;
 Inventors: Manthorpe *et al.*; Tel: 202/371-2600
 Title: Compositions and Methods for in vivo Delivery of
 Polynucleotide-Based Therapeutics

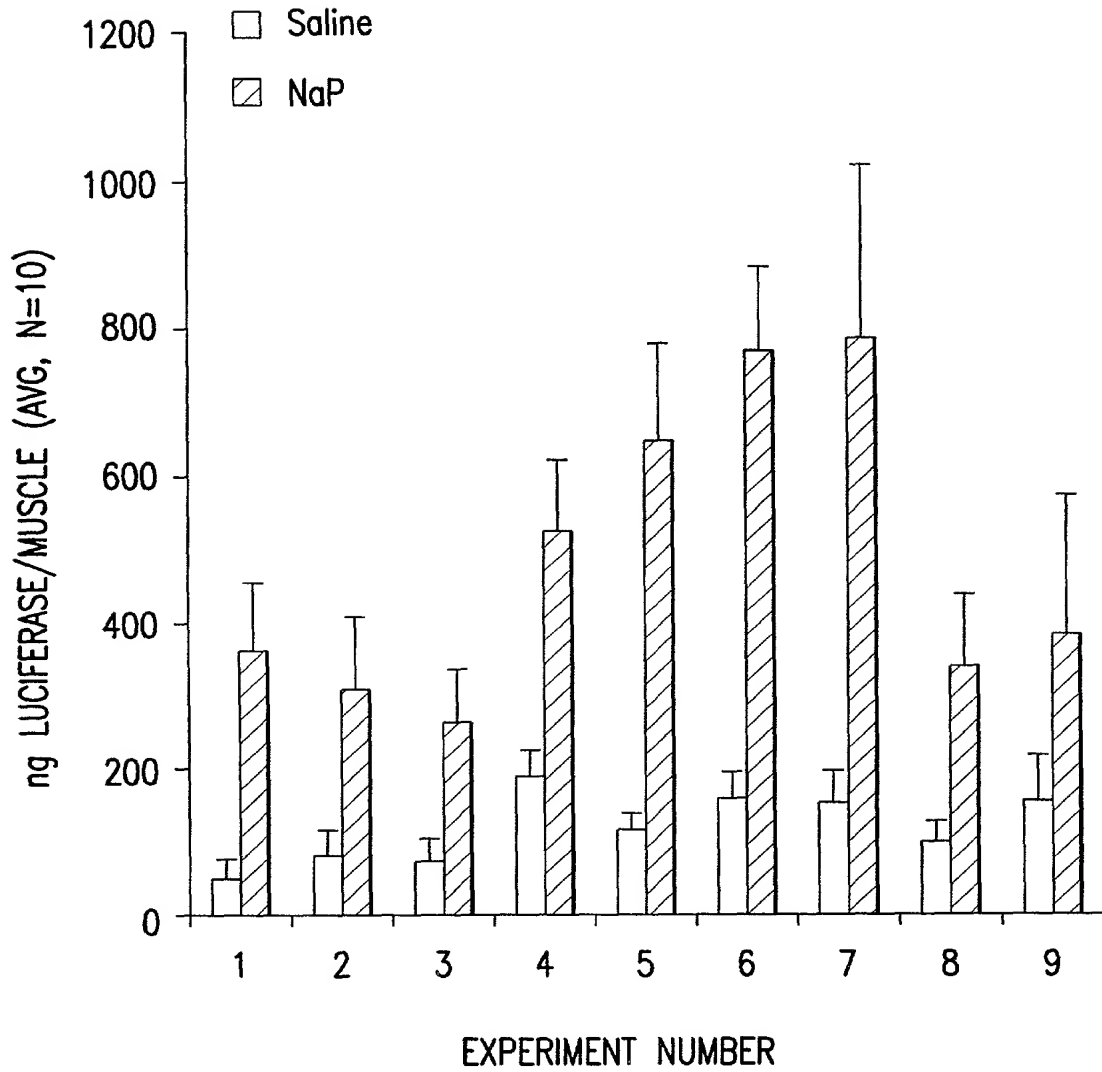
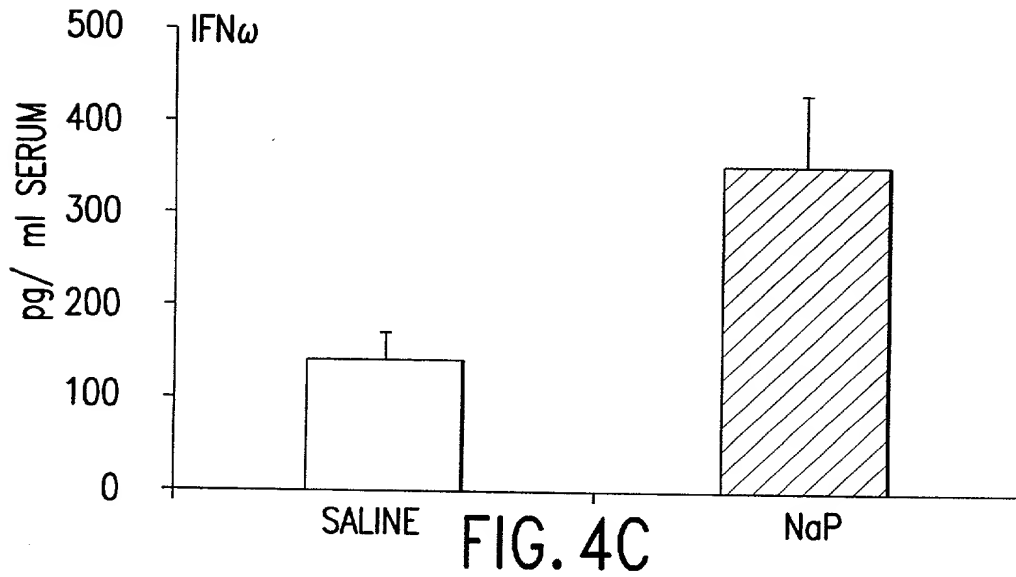
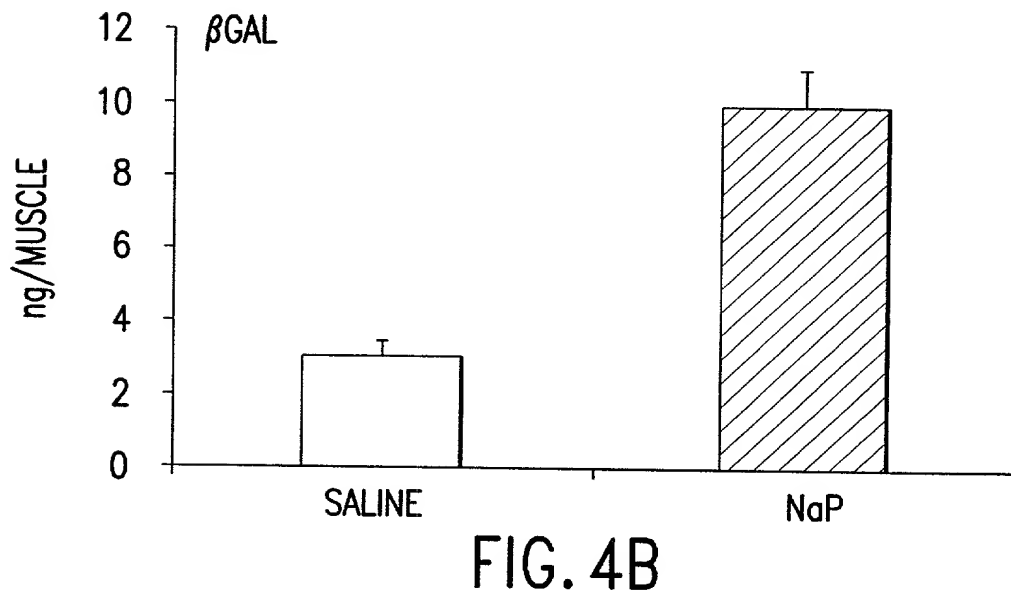
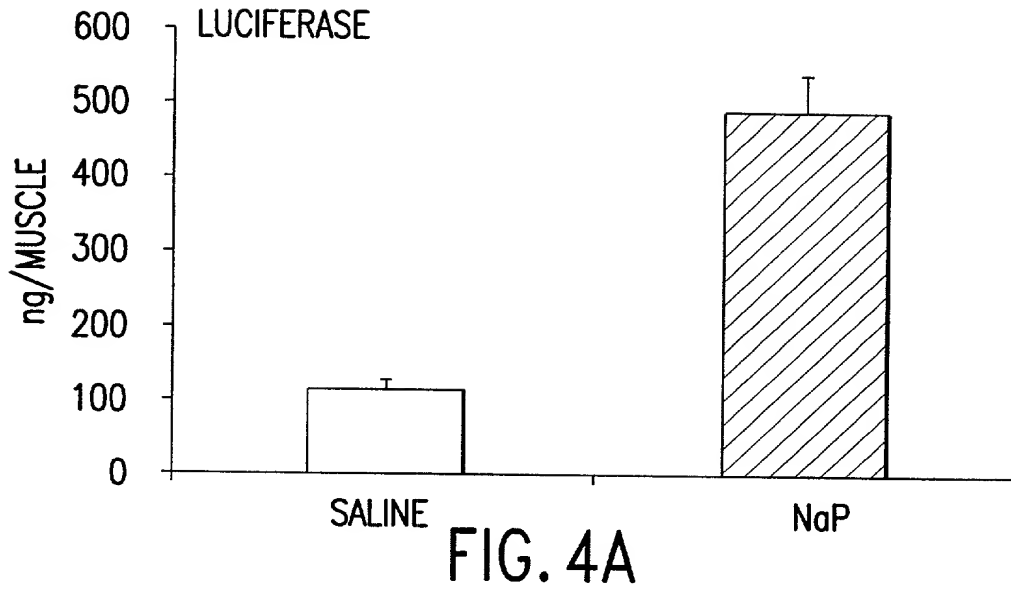


FIG.3



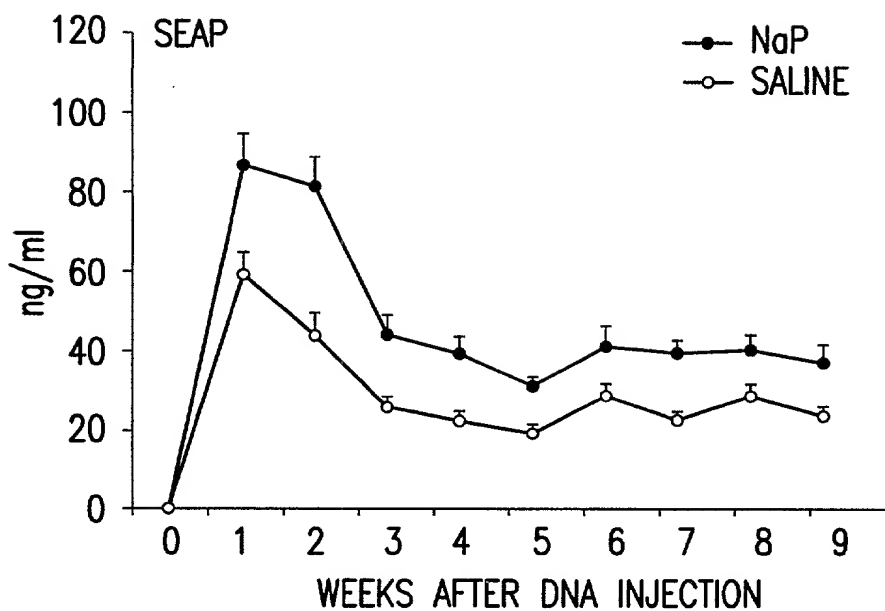


FIG. 5A

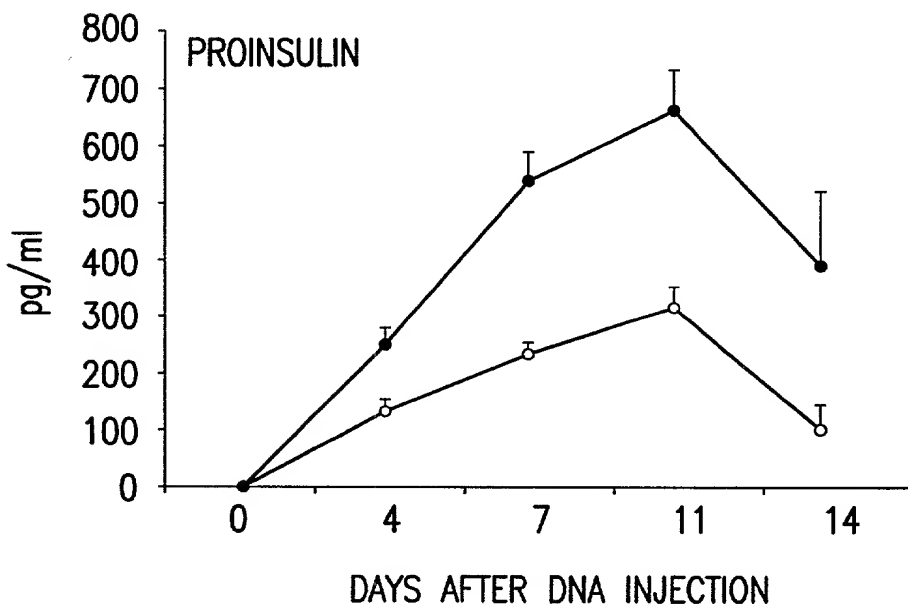


FIG. 5B

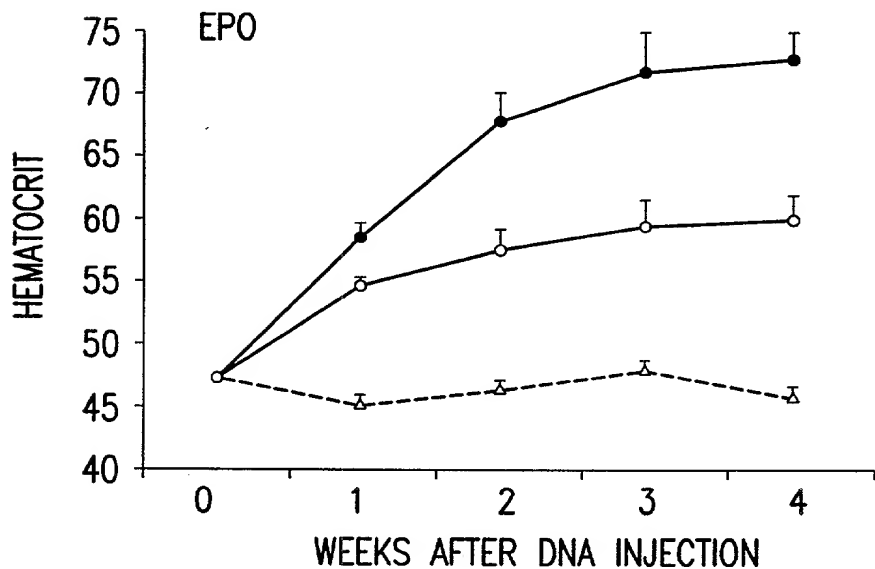


FIG. 5C

02760-4256-860



FIG. 6A



FIG. 6B



FIG. 6C



FIG. 6D

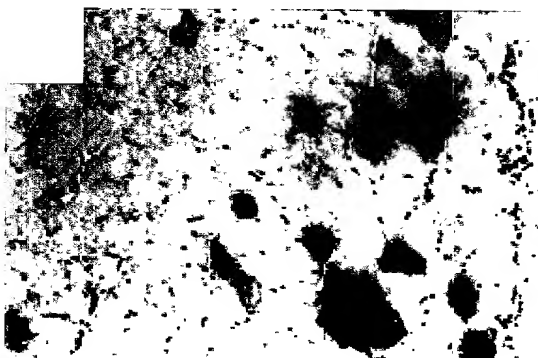


FIG. 6E



FIG. 6F

102760 12500000

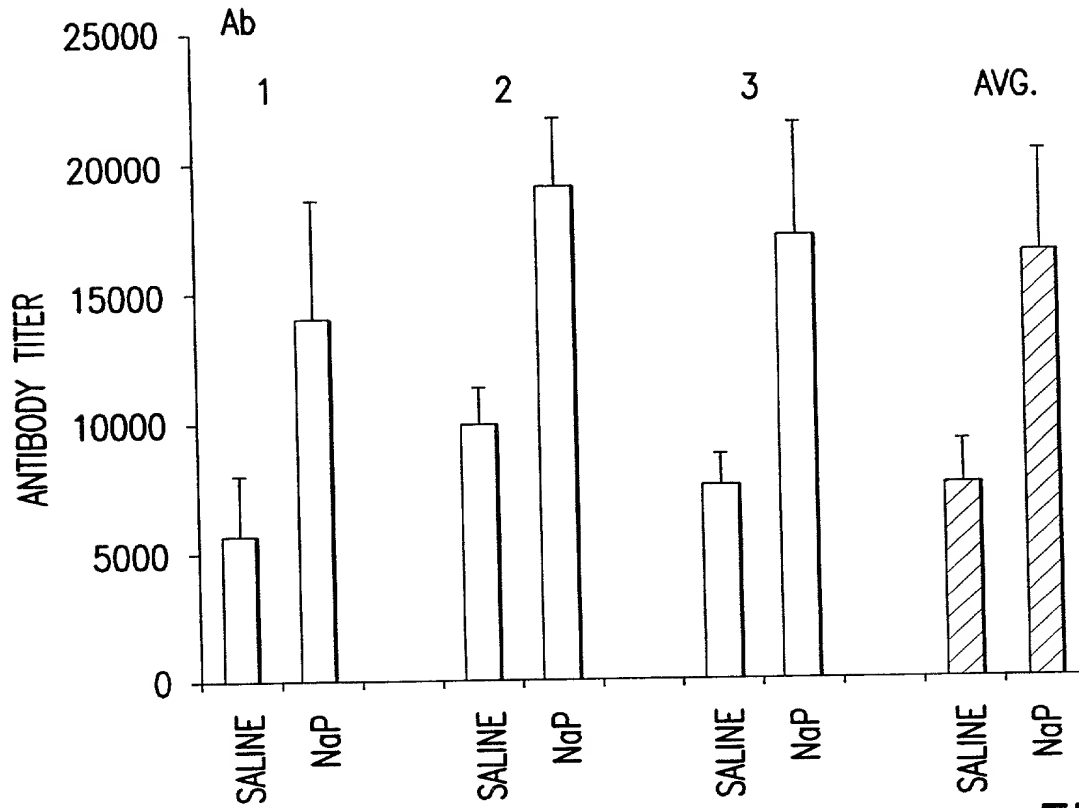


FIG. 7A

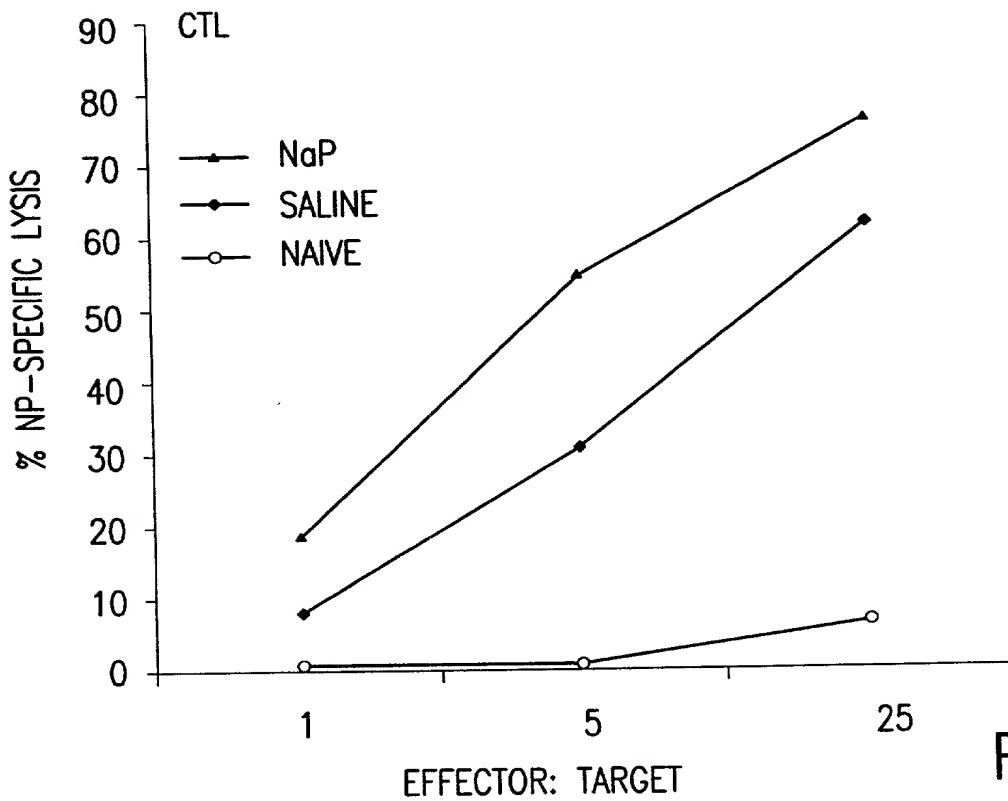


FIG. 7B

Appl. No. 09/839,574; Group Art Unit: 1646
Dkt. No. 1530.0180002/EKS/EJH;
Inventors: Manthorpe *et al.*; Tel: 202/371-2600
Title: Compositions and Methods for in vivo Delivery of
Polynucleotide-Based Therapeutics

P104
TRITON X-100
NP-40
L81
P103
P105
F108
L121
P65
L31
F68
L64
25R4
17R4
L92
L44
L101
L61
L62
25R2

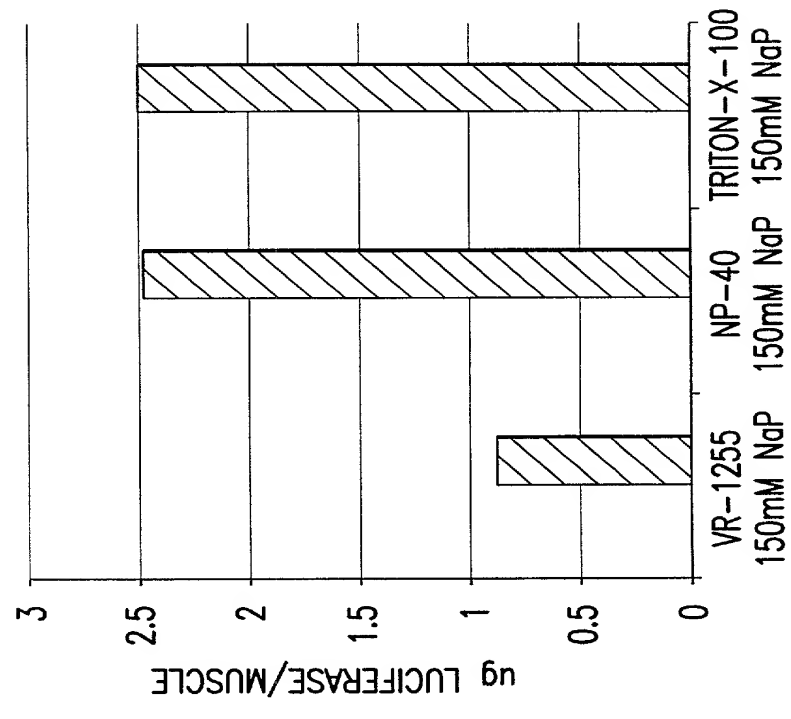
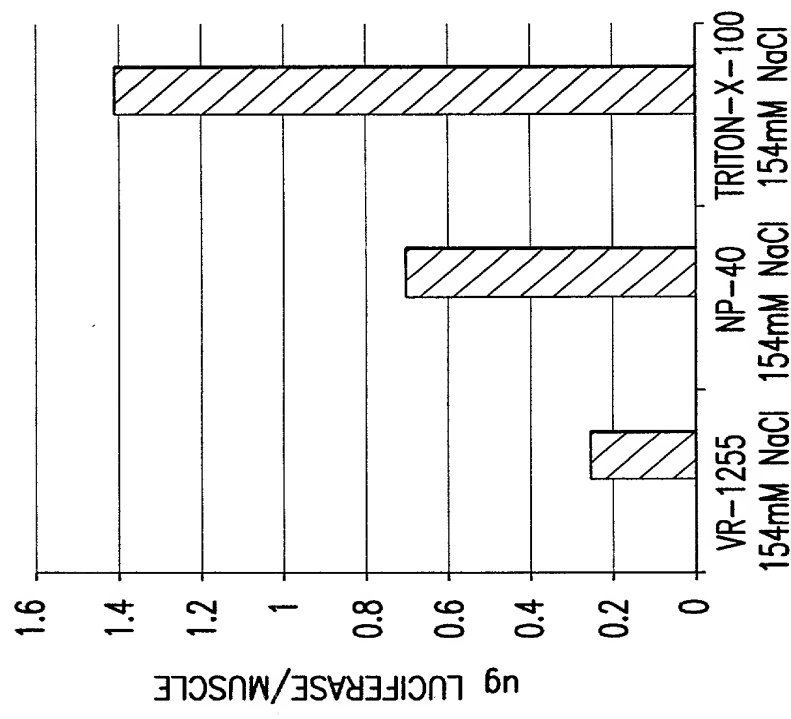


FIG.9

Pub. No. 2002/0165600

Appl. No. 09/839,574;
Dkt. No. 1530.0180002
Inventors: Manthorpe *et al.*
Title: Compositions and
Polynucleotide-Based T

ppl. No. 09/839,574; Group Art Unit: 1646
kt. No. 1530.0180002/EKS/EJH;
nventors: Manthorpe *et al.* ; Tel: 202/371-2600
itle: Compositions and Methods for in vivo Delivery of
olynucleotide-Based Therapeutics

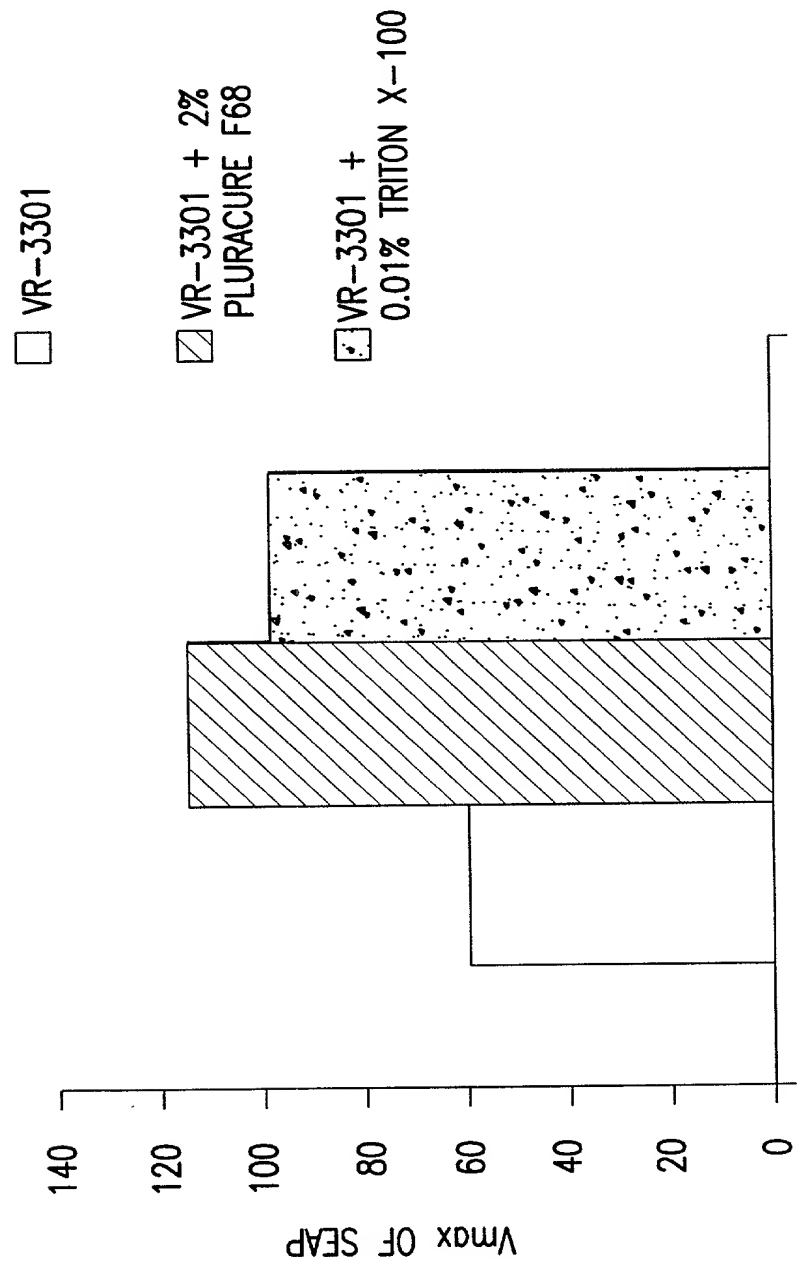


FIG. 11

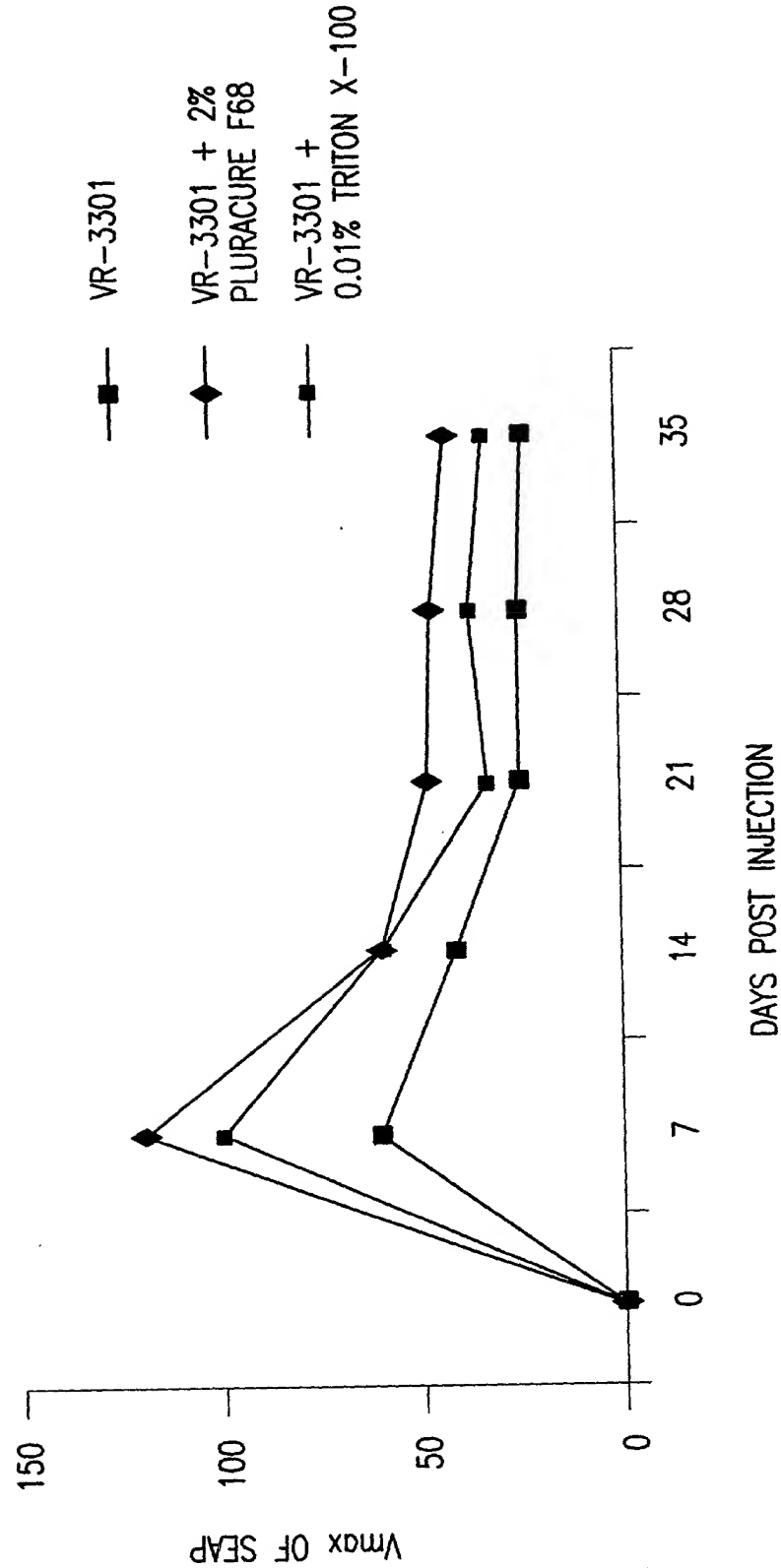


FIG.12

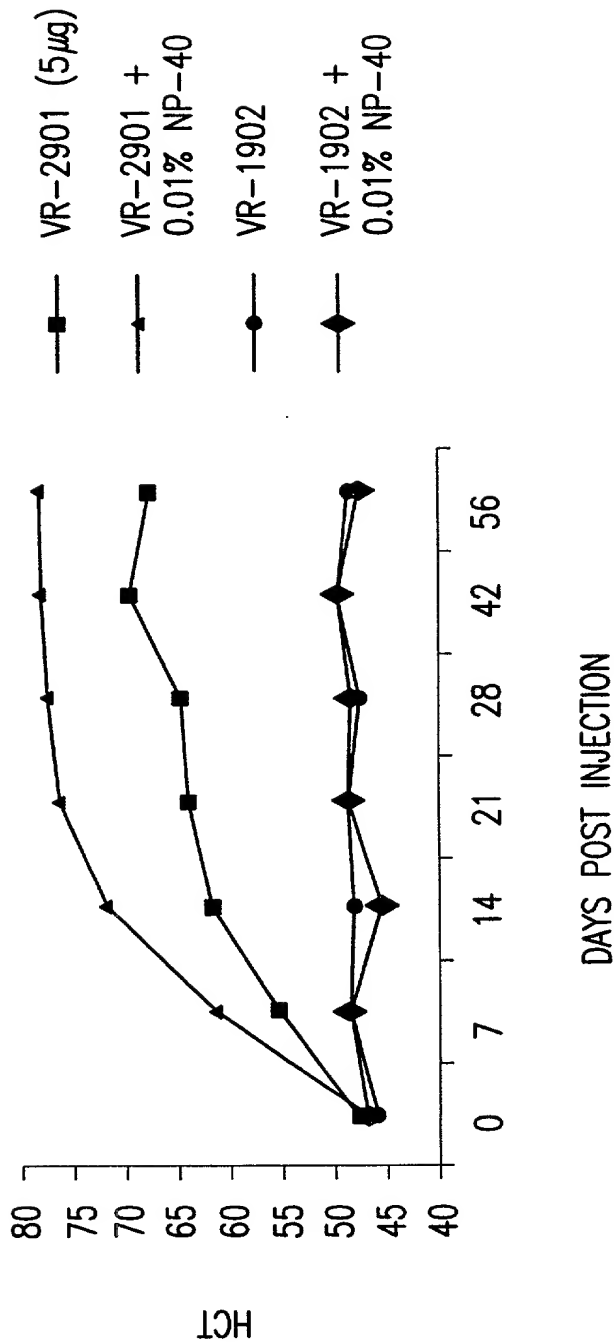


FIG. 13

◆ 10 μ g VR2901 IN 150 mM Na-P
 ■ 2.5 μ g VR2901 IN 150 mM Na-P
 ◇ 10 μ g VR2901 IN SALINE
 □ 2.5 μ g VR2901 IN SALINE
 × 10 μ g VR1902 IN 150mM Na-P

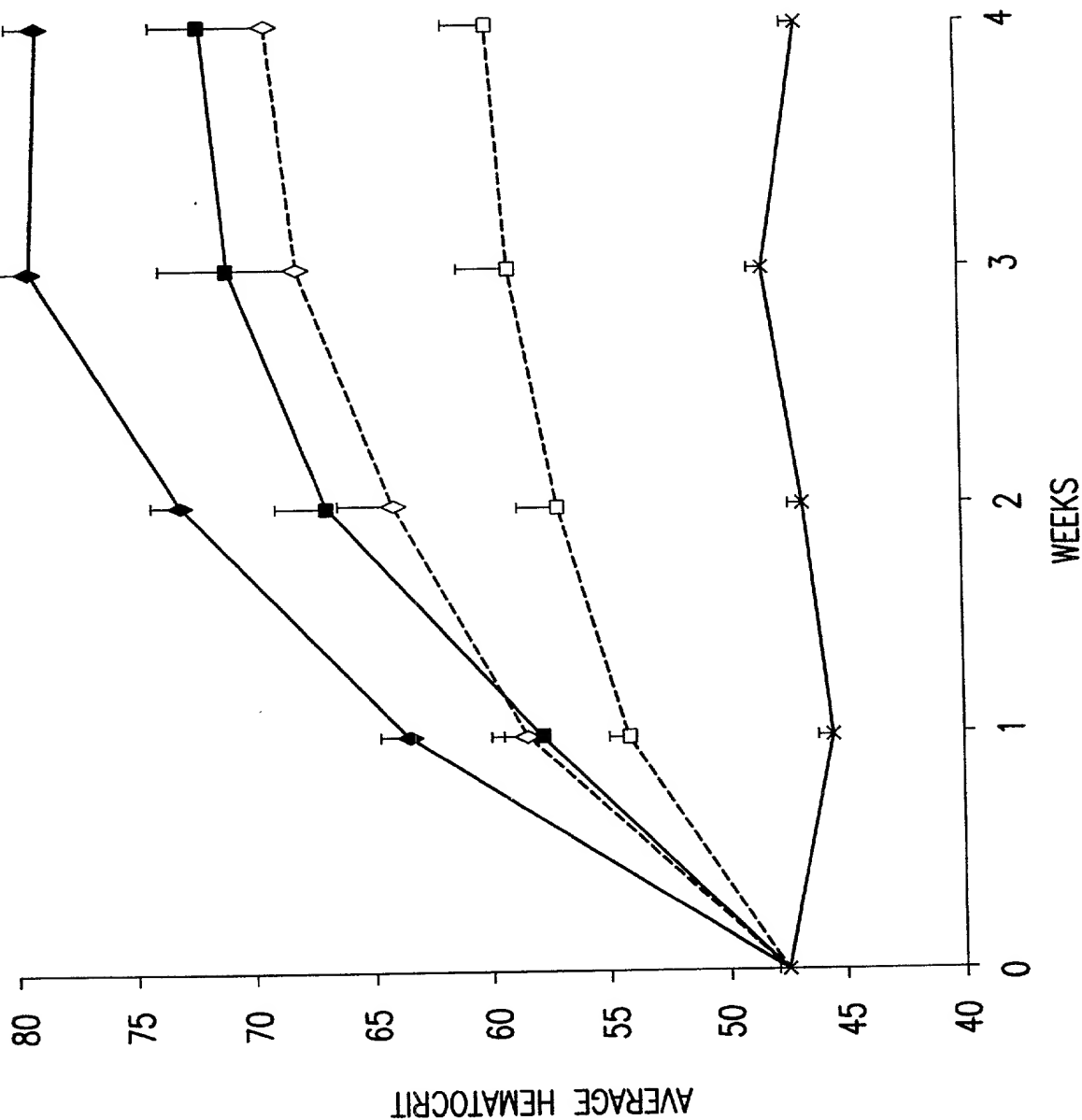


FIG. 14

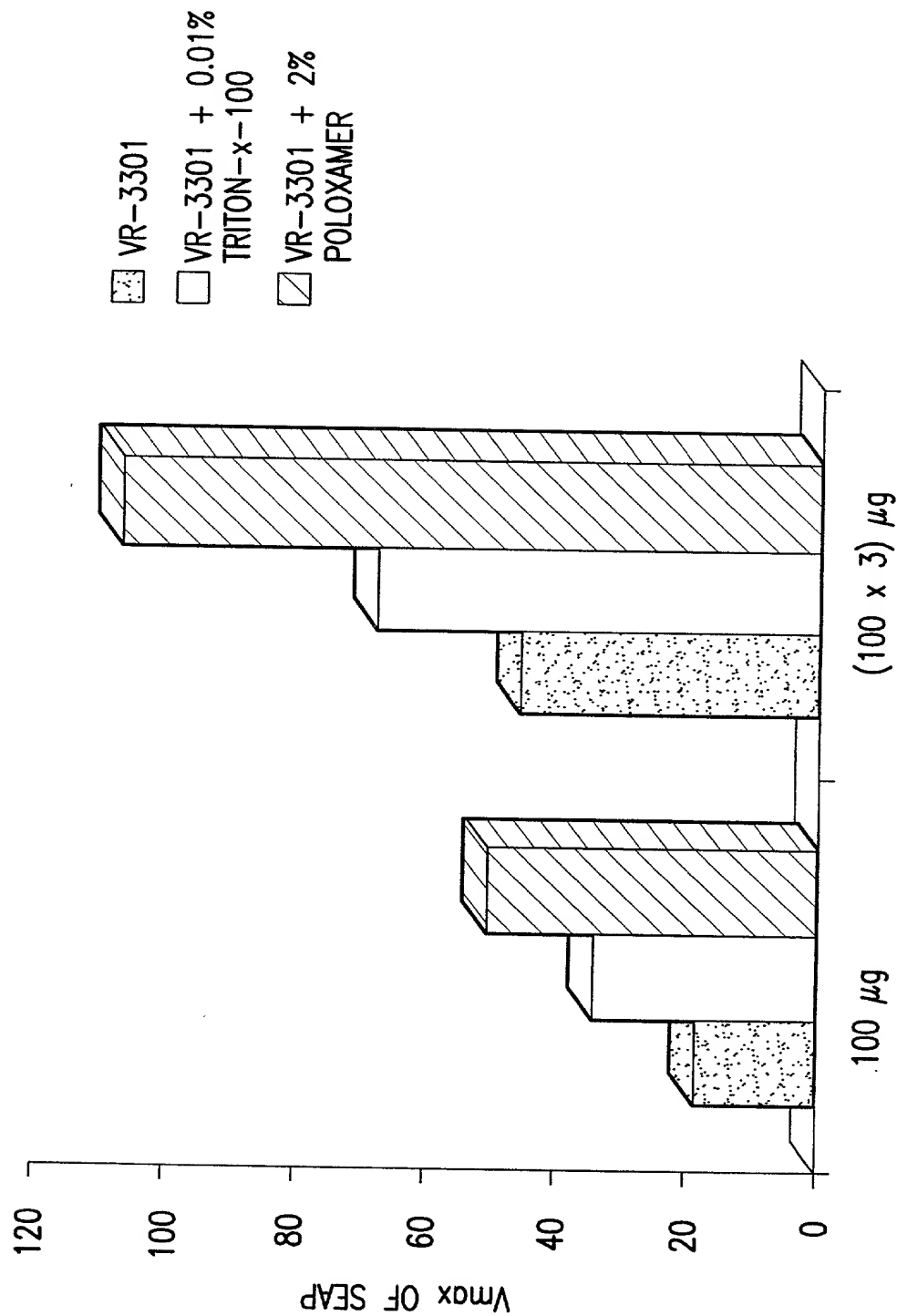
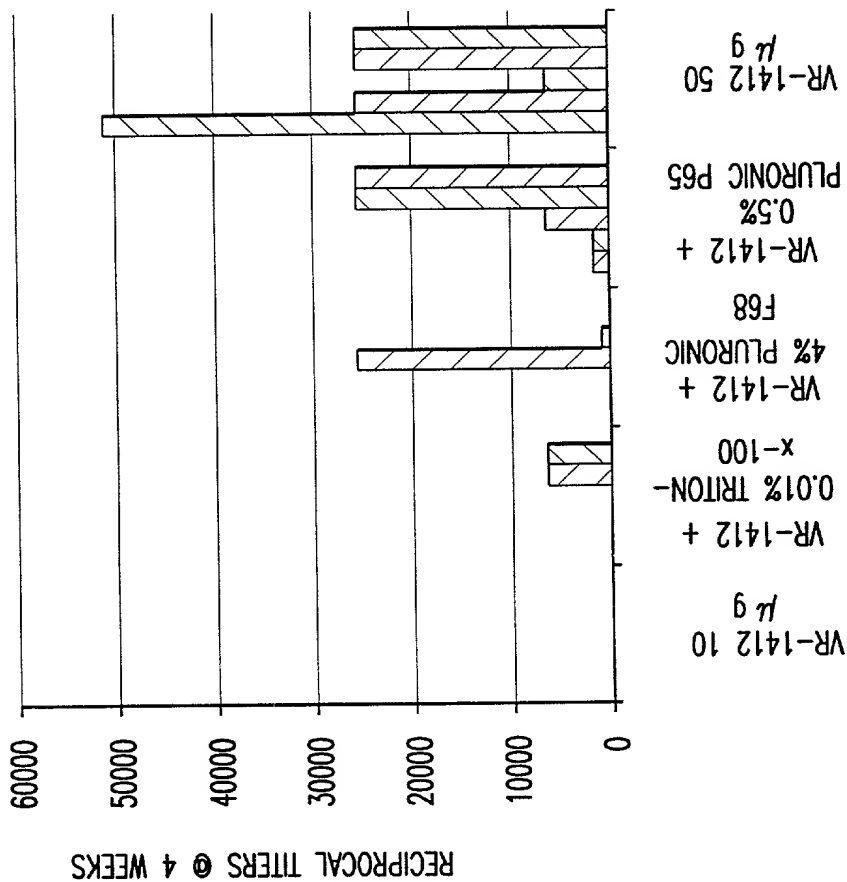
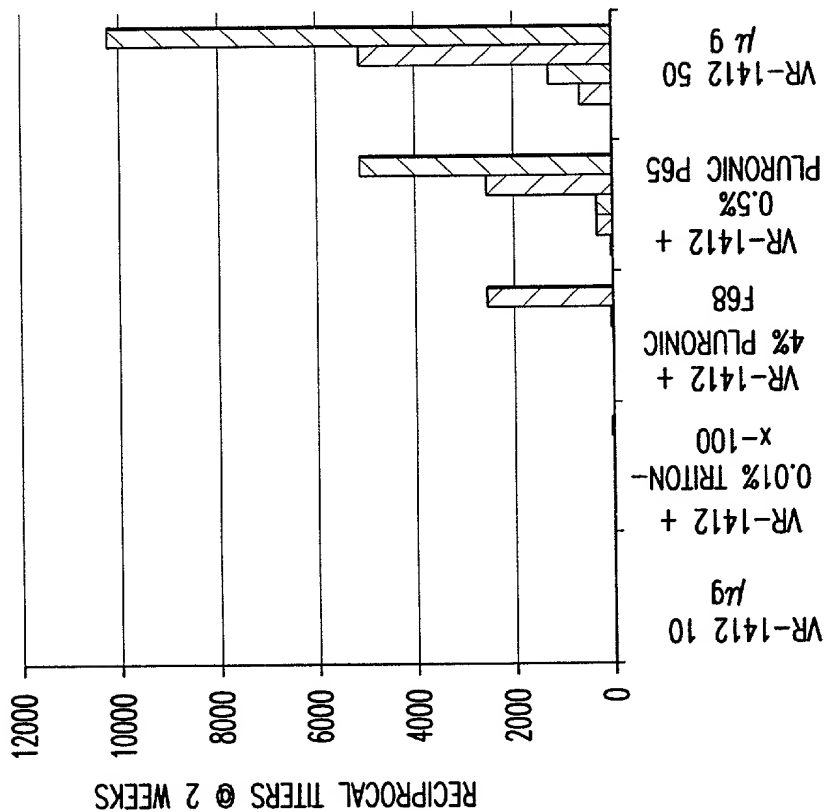


FIG. 15



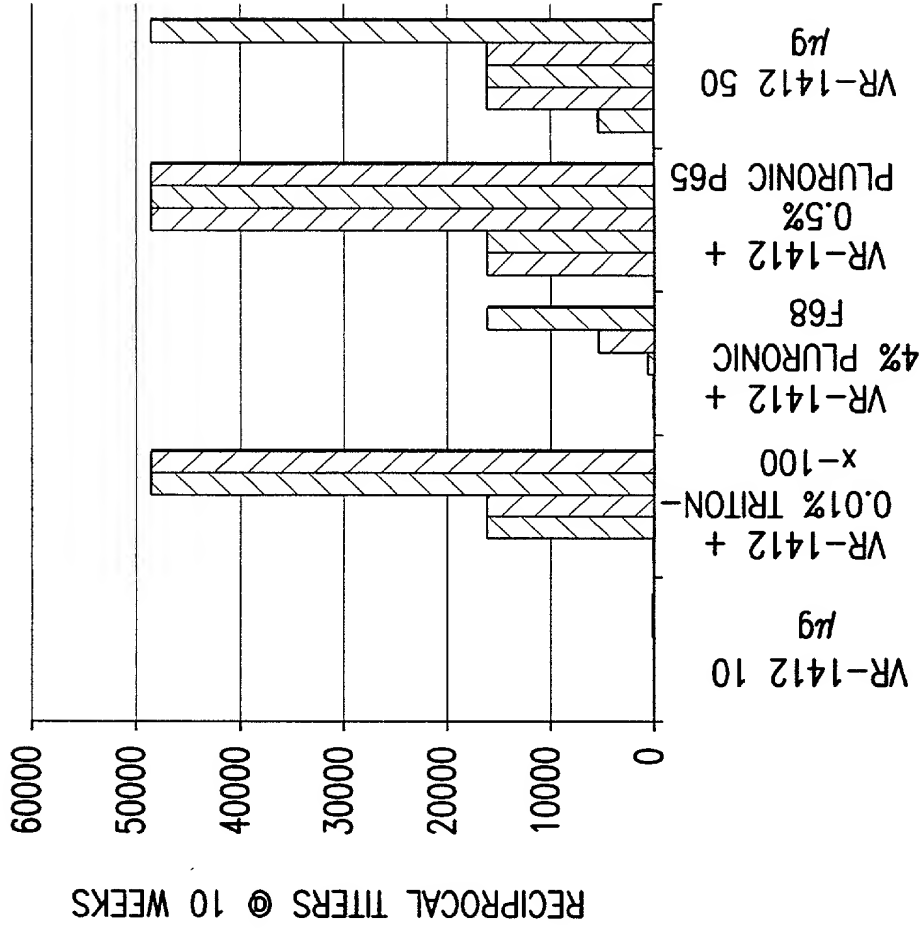


FIG. 16C

CTL ACTIVITY IS NOT INHIBITED WHEN pDNA +
POLOXAMER IS ADMINISTERED

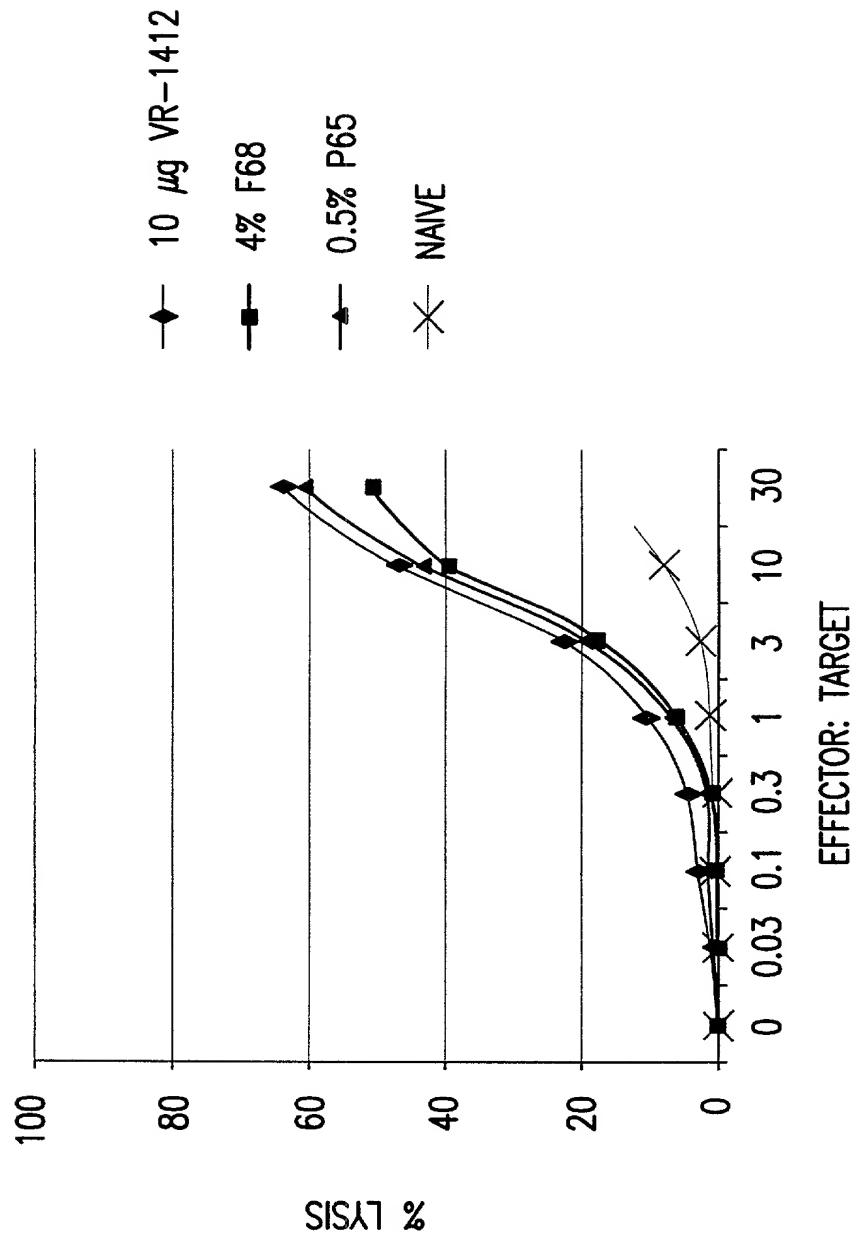


FIG. 16D

CLE EFFECTS ON IFNw pDNA MEDICATED ANTI-TUMOR EFFICACY

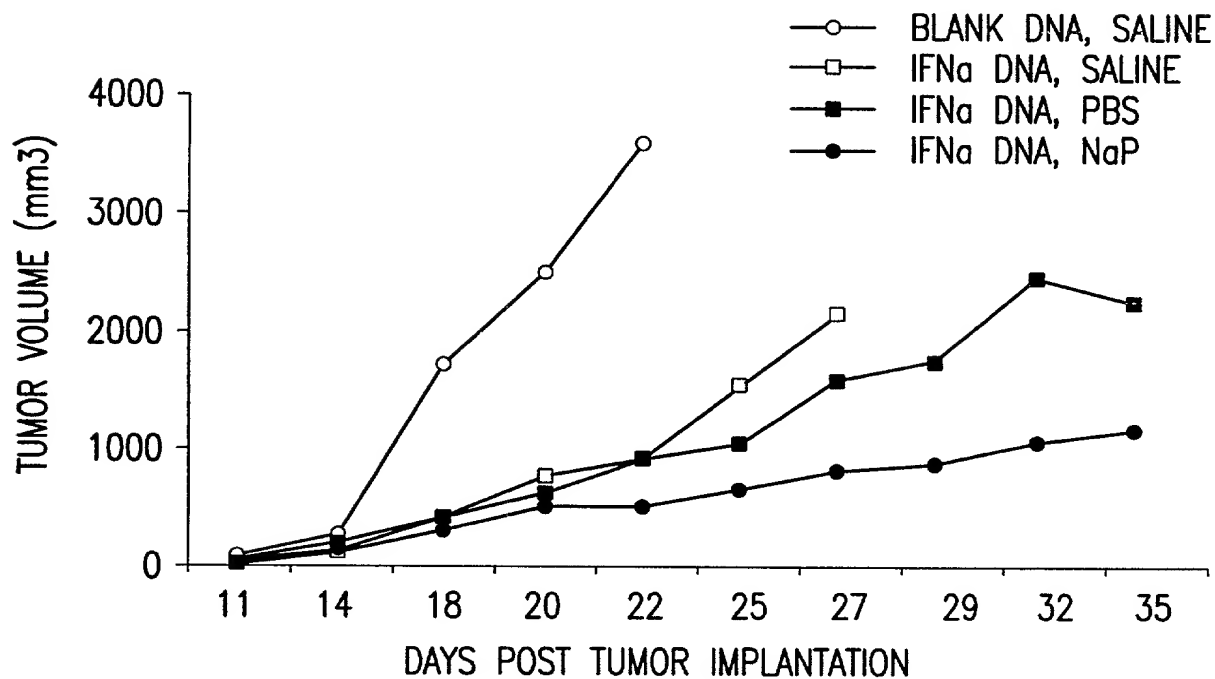


FIG. 17A

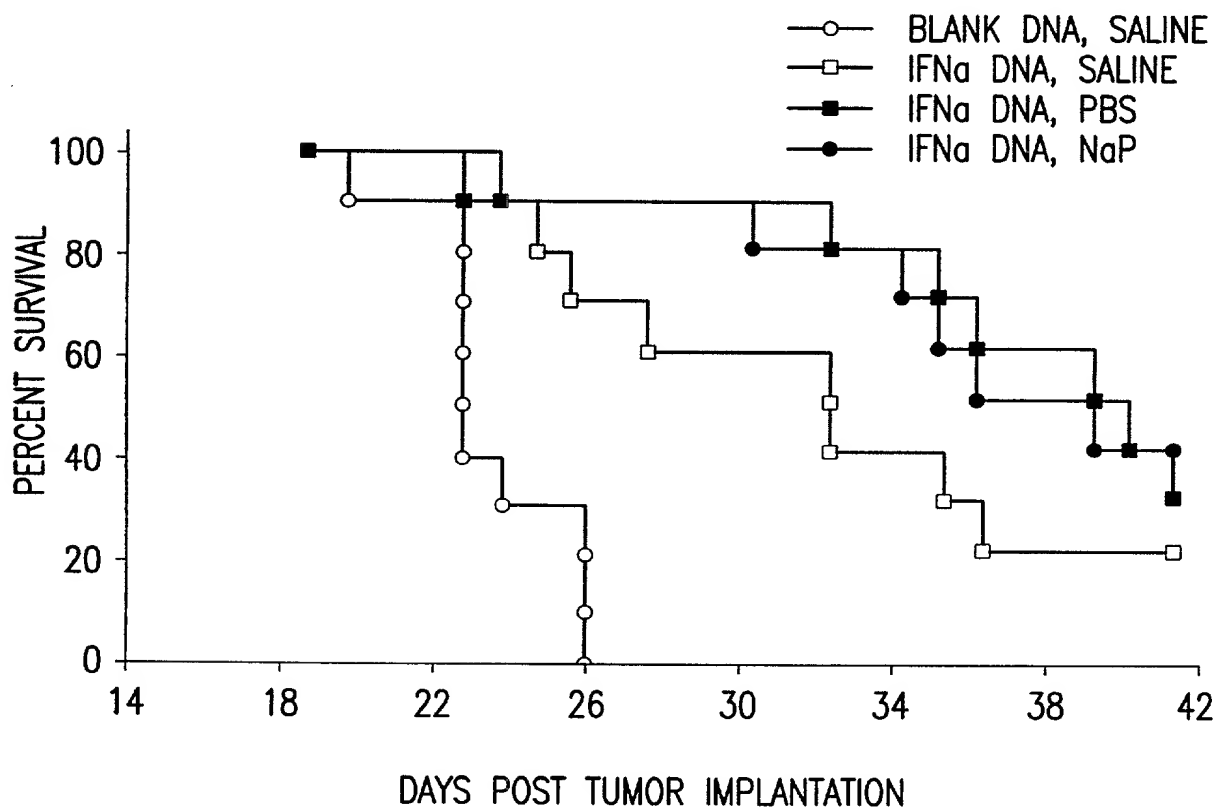


FIG. 17B

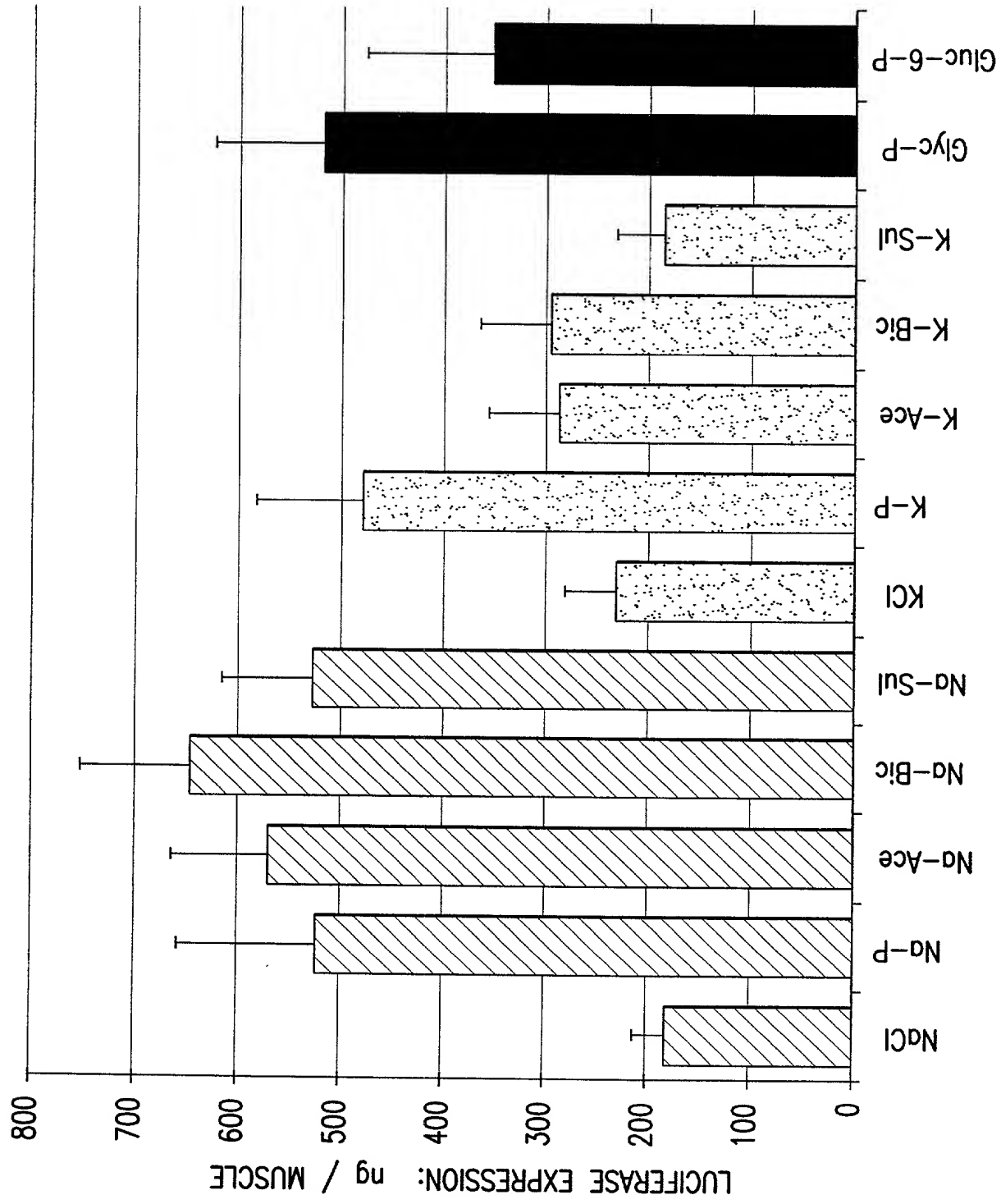
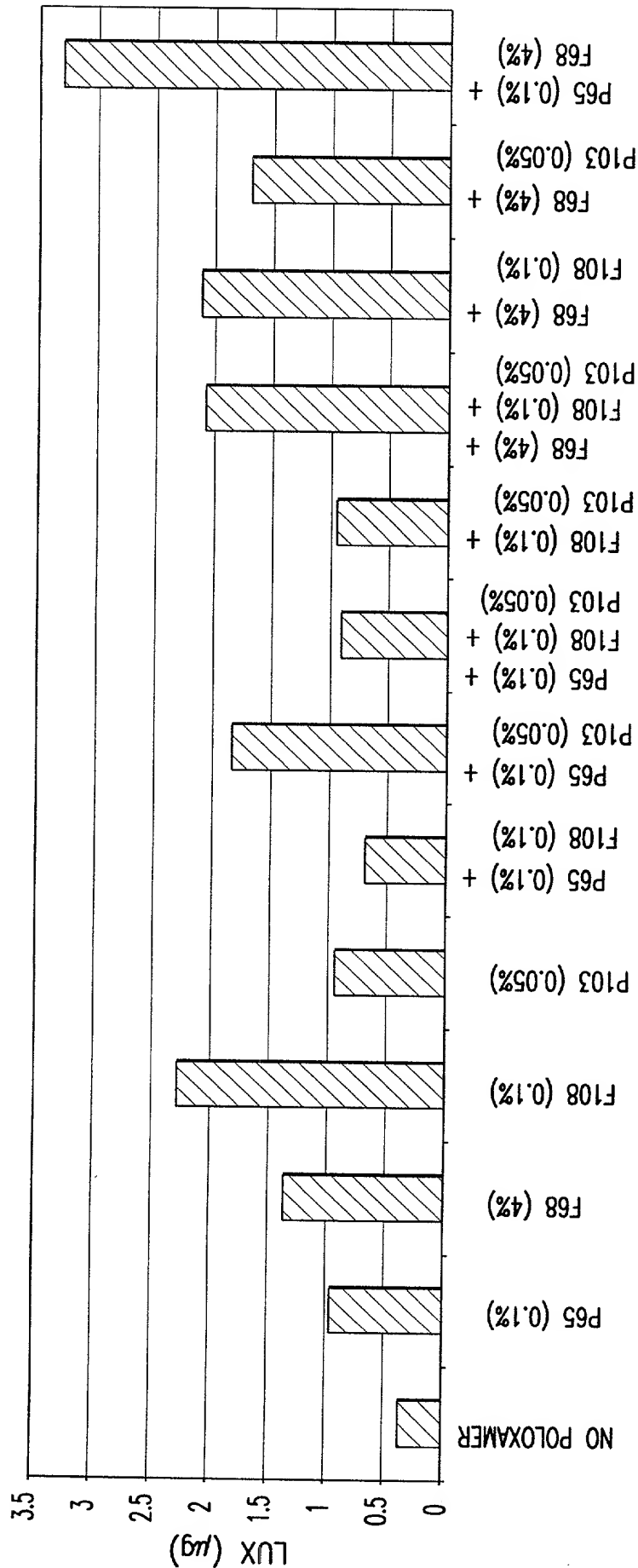
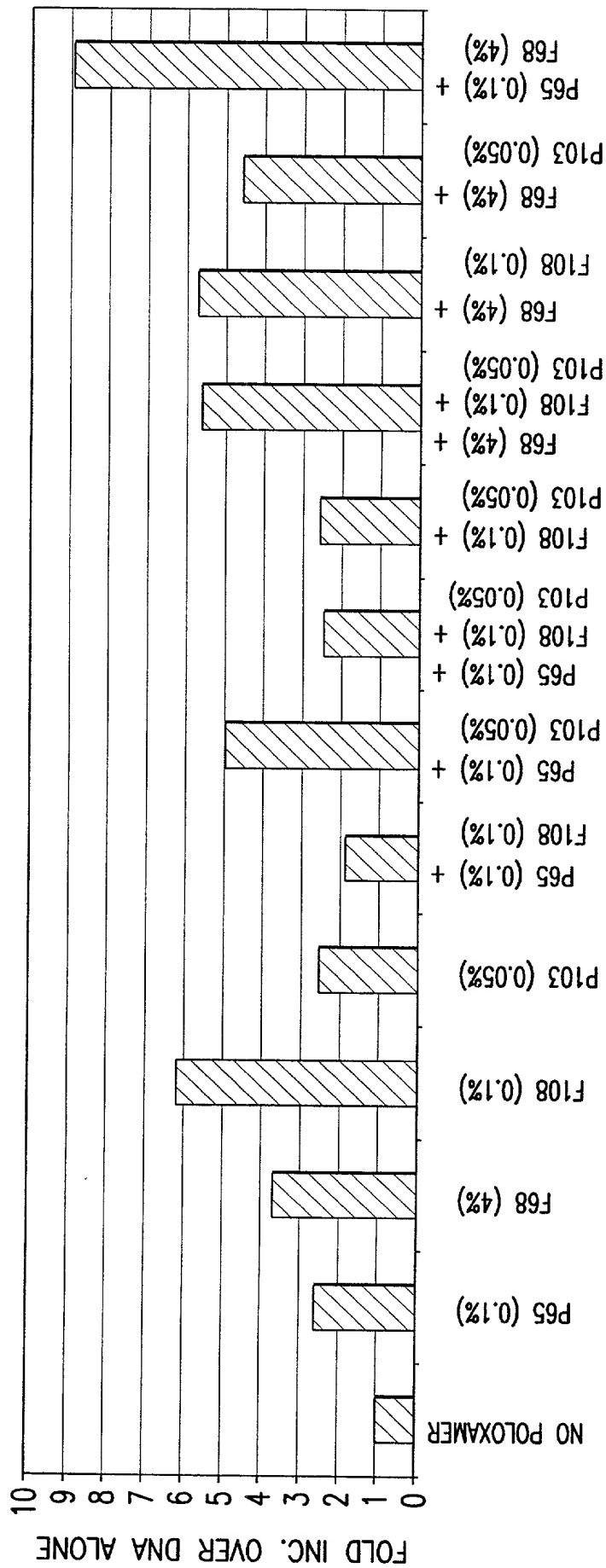


FIG. 19A



VR-1255 ± POLOXAMER(S)

FIG. 19A



VR-1255 ± POLOXAMER(S)

FIG. 19B

DAY 3 LUCIFERASE EXPRESSION AFTER INTRAMUSCULAR
ADMINISTRATION OF VR1255 ± POLOXAMER (F68)

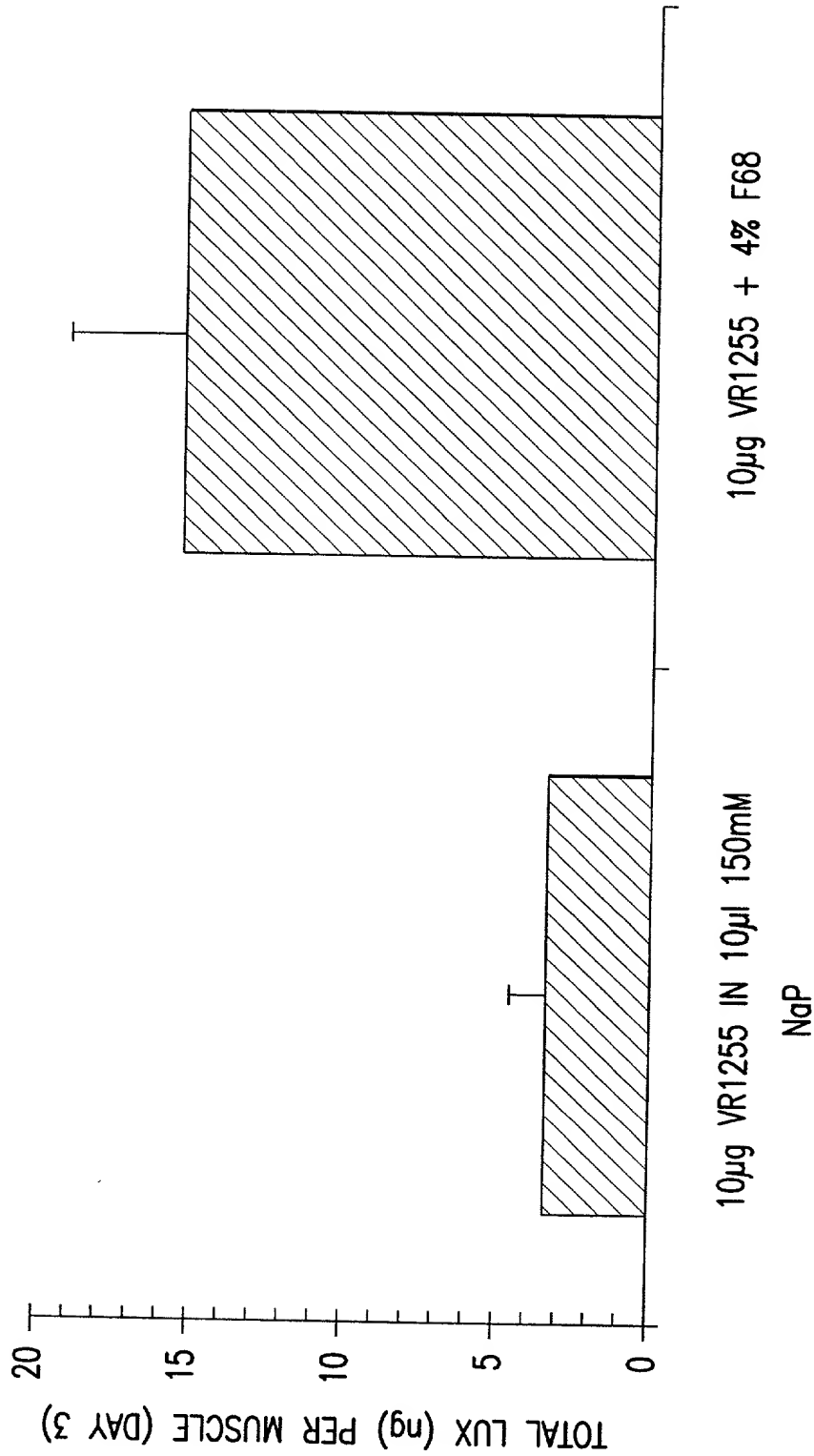


FIG. 20A

DAY 3 LUCIFERASE EXPRESSION AFTER INTRAMUSCULAR
ADMINISTRATION OF VR1255 ± POLOXAMER (25R2)

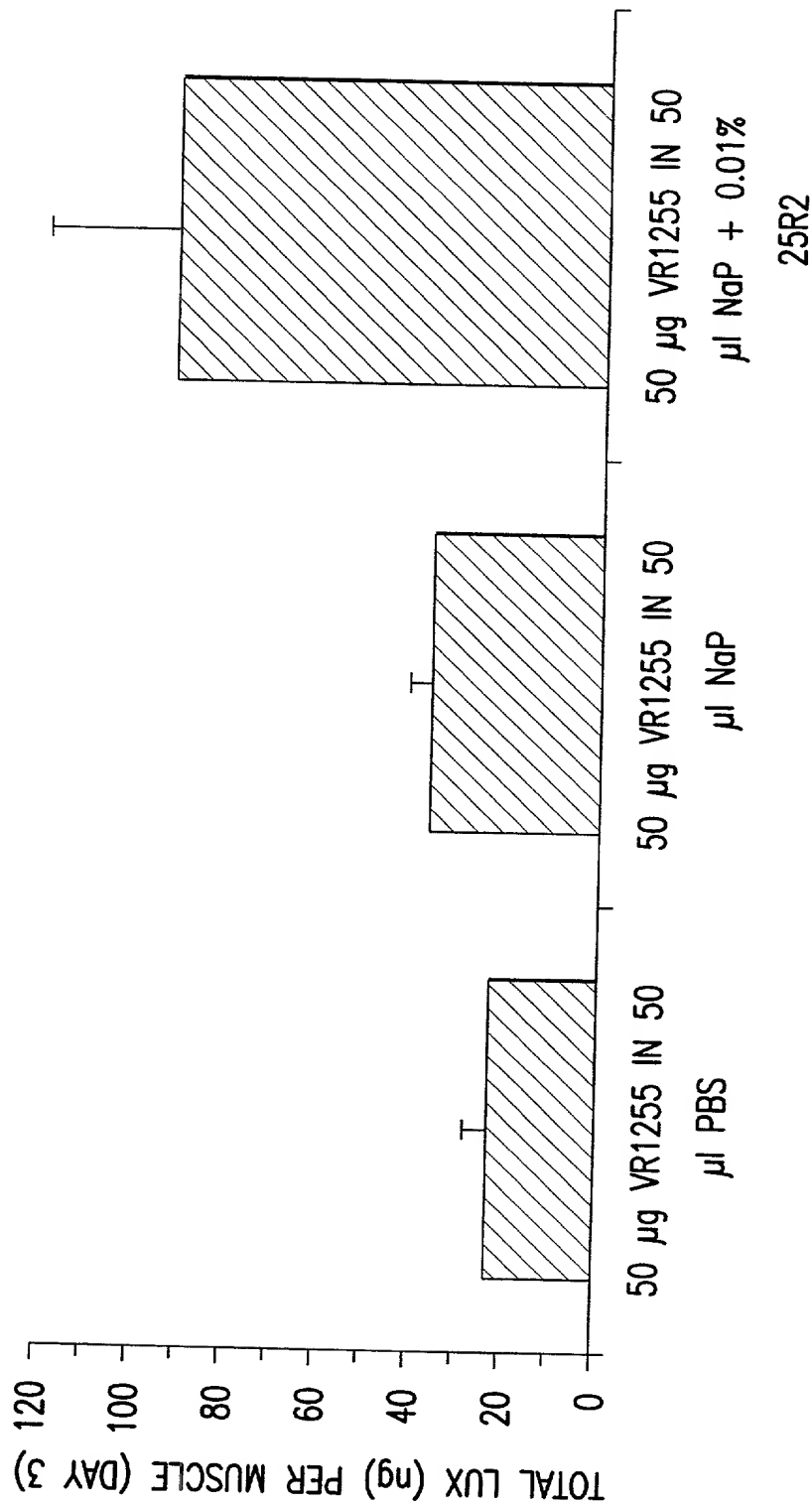


FIG. 20B

HEMATOCRIT LEVELS AFTER A SINGLE DOSE (1 μ g) OF VR2901
 \pm POLOXAMER 25R2

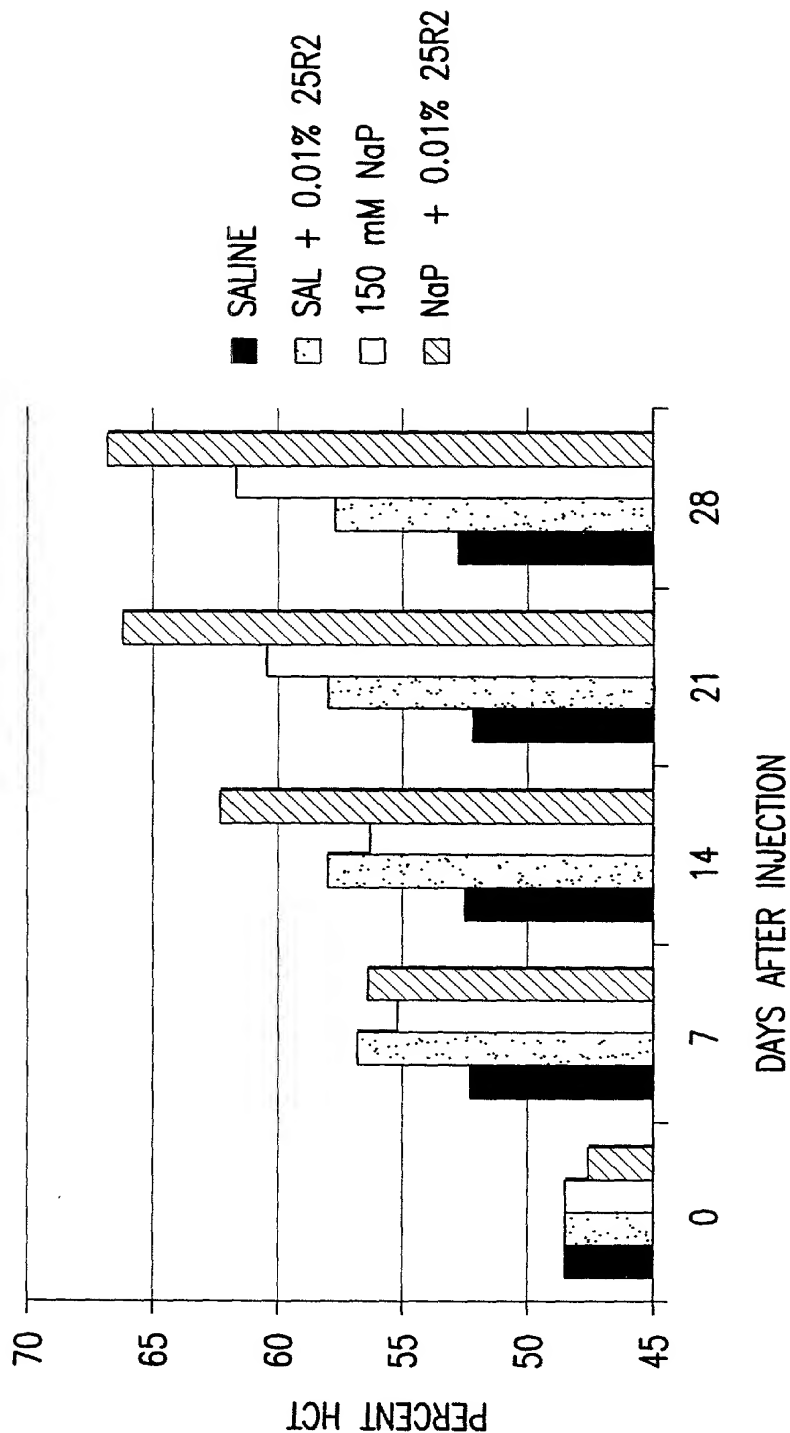


FIG. 21

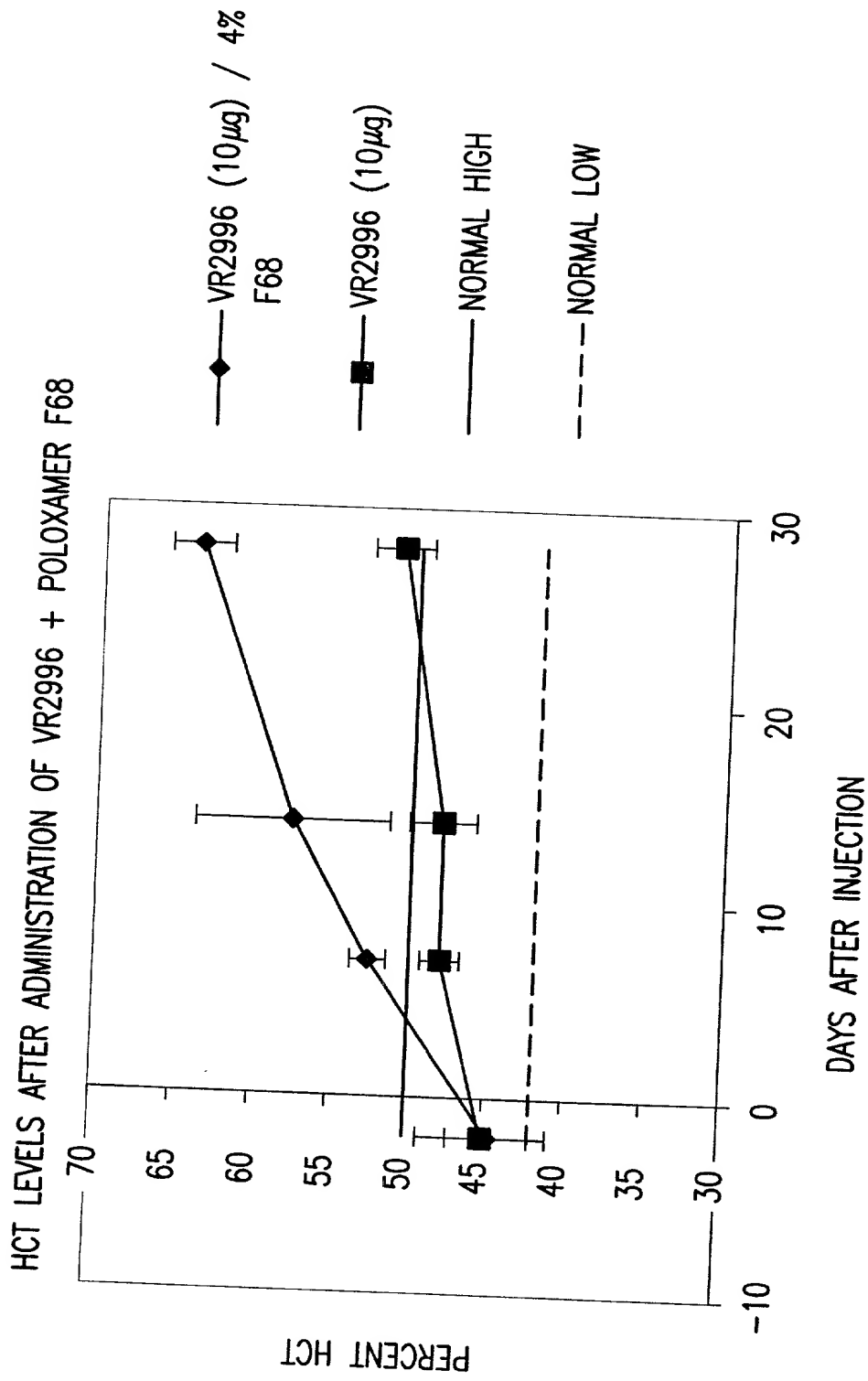


FIG. 22

FIG. 23

DNA DOSE RESPONSE AFTER INJECTION OF VR1255 ± POLOXAMER (25R2)

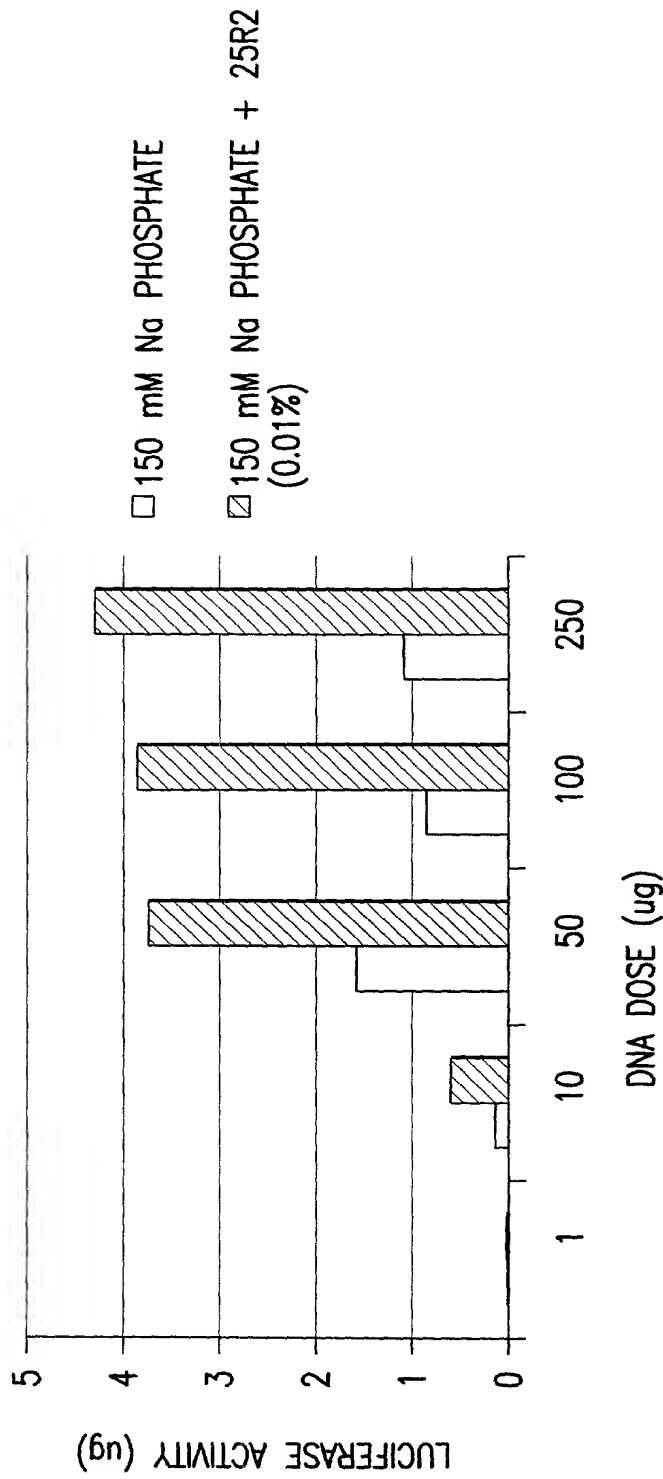


FIG. 23

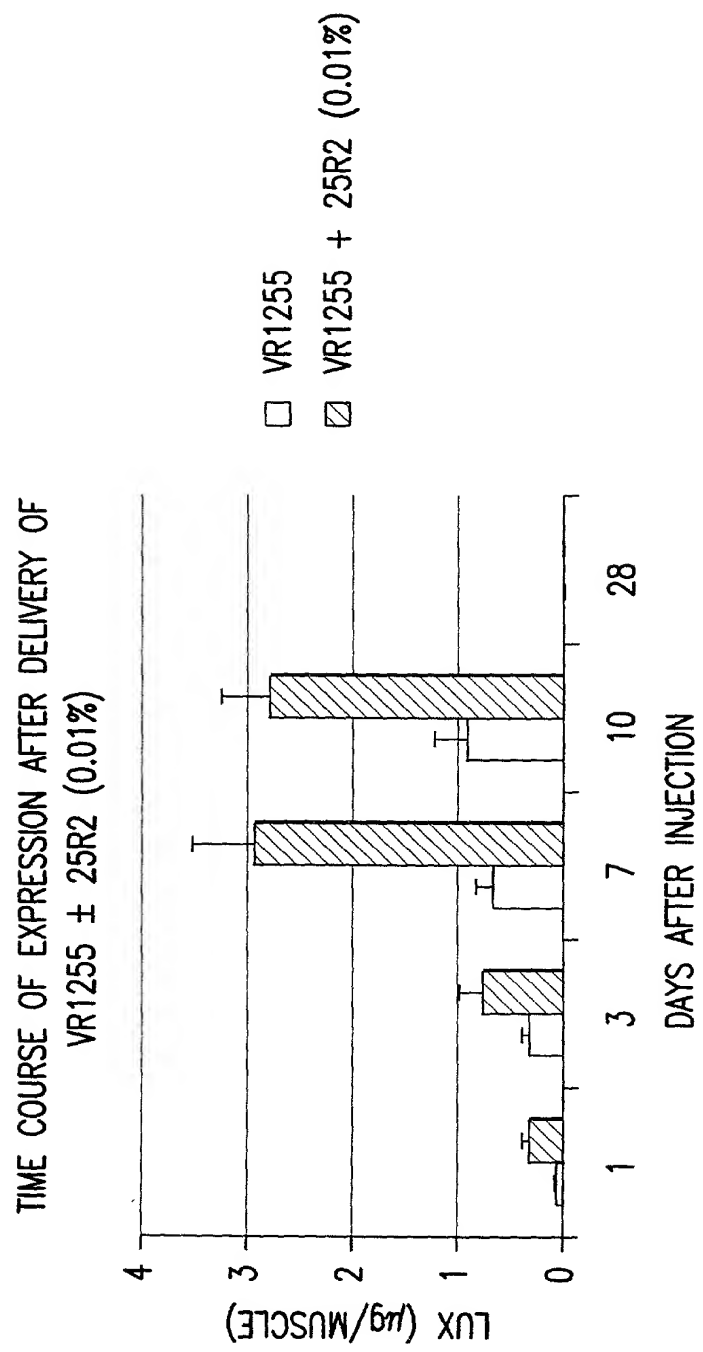


FIG. 24

TRANSFECTION OF MOUSE RECTUS FEMORIS WITH VR1412 (pBgal) ±
POLOXAMER 25R2 (0.01%)

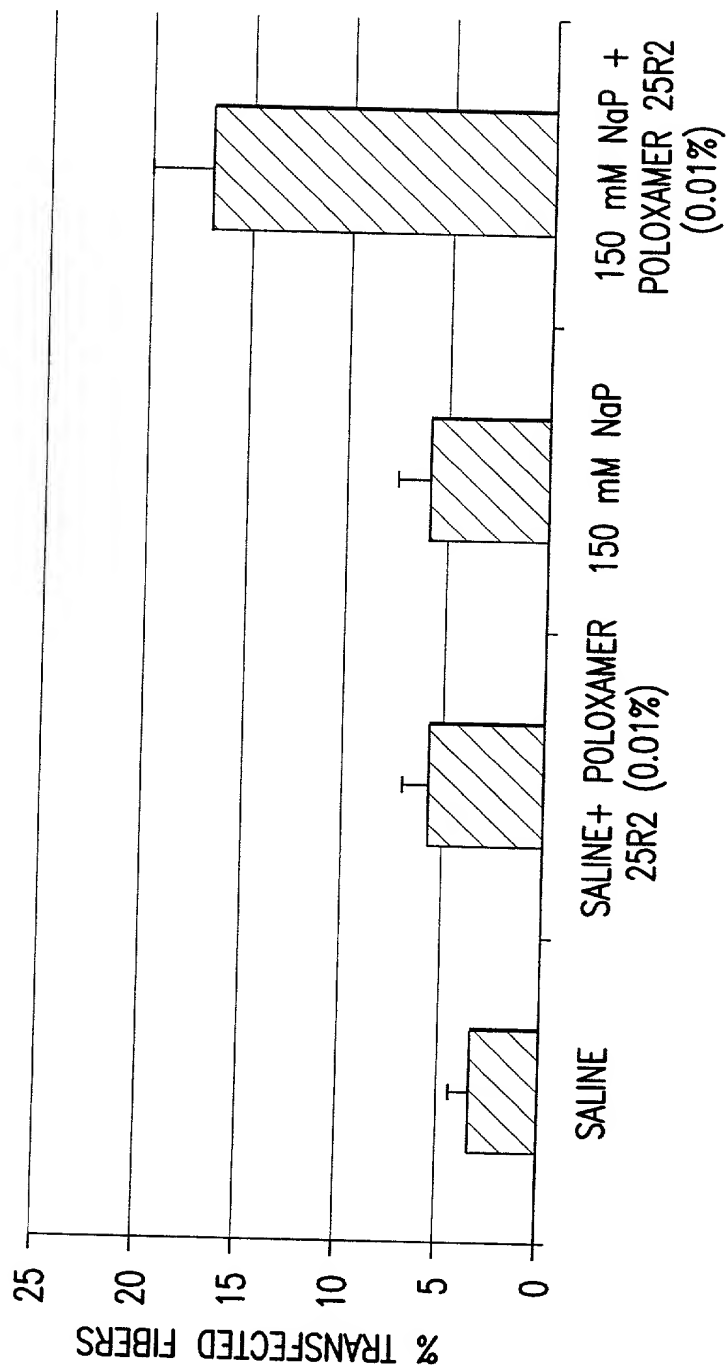


FIG. 25

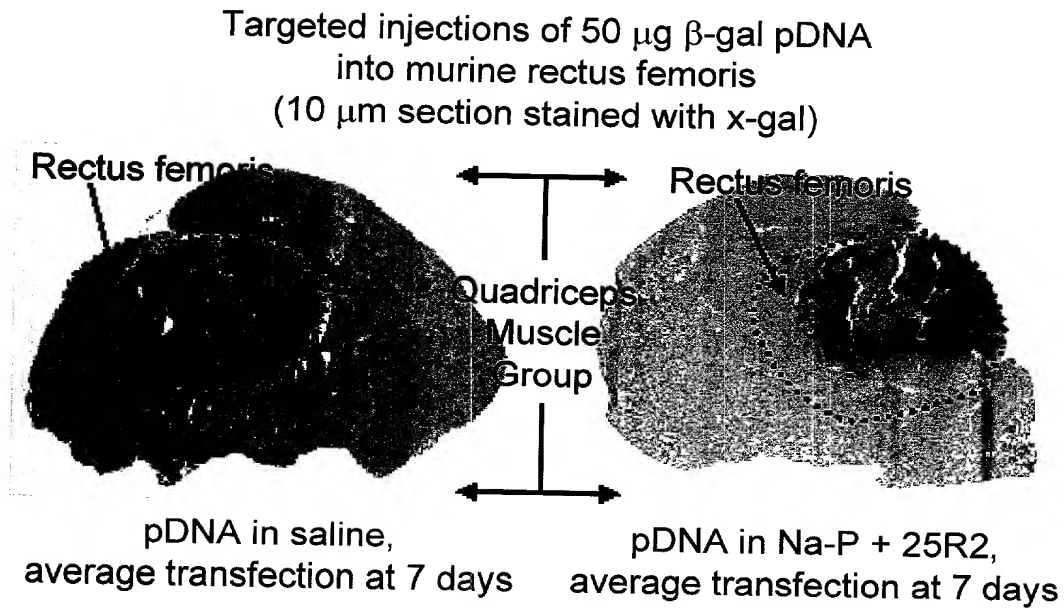


FIG.26